

Massachusetts, central and western New York, northern Illinois, Iowa, South Dakota, New Mexico, Arizona and Oregon, and in Mexico to Hidalgo; commonly in rich or calcareous soils.

GLYCERIA arkansana, n. sp., ab *G. septentrionali* differt culmis crassis 1 cm. diametro; foliis flaccidis 1–1.8 cm. latis subtus laevibus supra scabridulis, ligulis hyalinis 1 cm. longis; paniculis 4–7 dm. longis, ramis laevibus adscendentibus deinde divergentibus; spiculis linearibus 10–15-floris 1.5–2 cm. longis; glumis oblongo-ovatis laevibus subcoriaceis, superiore 2.5–3.5 mm. longa; lemmatibus membranaceis oblongo-ovatis subacutis 2.5–3 mm. longis hirtellis valde 7-costatis.—Arkansas and Louisiana. ARKANSAS: common in swamp, Varner, Lincoln County, April 29, 1898, *B. F. Bush*, no. 9, as *Panicularia fluitans* (TYPE in Gray Herb.). LOUISIANA: without definite locality, *Hall*, no. 685; infrequent in wet ground, Gretna, May 10, 1899, *C. R. Ball*, no. 362, as *Panicularia fluitans*.

Glyceria arkansana is a coarser plant than *G. septentrionalis*, with broader and more flaccid leaves and larger panicles. Yet, its strongest characters are in the smaller and more delicate spikelets. In *G. septentrionalis* the glumes are firmer, the upper one 4.5–5.7 mm. long (in *G. arkansana* 2.5–3.5 mm.). The coriaceous lemmas of *G. septentrionalis* are 3.6–5.5 mm. long, scabrous-puberulent and only obscurely 7-nerved; the lemmas of *G. arkansana* only 2.5–3 mm. long, thin or membranaceous, definitely hirtellous and very sharply and prominently nerved. *G. fluitans* (L.) R. Br., to which *G. arkansana* is likewise related, has the glumes and lemmas as large as in *G. septentrionalis* but the lemmas thinner and less pubescent; *G. borealis* (Nash) Batchelder has as small and as delicate spikelets as *G. arkansana* but the lemmas quite glabrous; and *G. leptostachya* Buckl. and *G. acutiflora* Torr., though of the same group, are so different as scarcely to need comparison with the plant of Arkansas and Louisiana.

(To be continued)

NOTES FROM THE HERBARIUM OF THE UNIVERSITY OF WISCONSIN—IV.

NORMAN C. FASSETT.

ACONITUM NOVEBORACENSE Gray, var. **quasiciliatum**, n. var., caulibus saepe recumbentibus, 6–10 dm. longis; foliis 5–20 cm. latis, orbiculatis, fere ad basem 5–7-divisis, fere glabris minutis setulis dispersis marginis revolutae exceptis; sepalis caeruleis, supremis 1.5 cm. longis, in rostrum horizontale contractis, filamentis superne

caeruleo-striatis, infra albis, planis; antheris orbiculatis, 0.4–0.6 mm. diametro; carpellis 2–3, 8–9 mm. longis, pedicellis ascendentibus vel recurvatis.

Stems often reclining, 6–10 dm. long; leaves 5–20 cm. broad, orbicular, 5–7-cleft nearly to the base, nearly glabrous except for minute scattered hairs along the inrolled margin; sepals blue, the uppermost 1.5 cm. long, rather abruptly contracted to a horizontal beak; filaments streaked with blue above, flat and white below; anthers orbicular, 0.4–0.6 mm. in diameter; mature carpels 2–3, 8–9 mm. long, on ascending or somewhat recurved pedicels.—WISCONSIN: small precipitous shaded gorge, Mill Bluff, Lodi Mills, September 29, 1928, *N. C. Fassett*, no. 7610 (TYPE in Herb. Univ. of Wis.); September 19, 1925, *N. C. Fassett*, no. 2686; Pewit's Nest Gorge, Baraboo, August 20, 1927, *Bernard Harkness*.¹ IOWA: Postville, July 4–6, 1904, *Pammel, Orr & Wilson*; June 22, 1918, *L. H. Pammel*; Dubuque County, June 18, 1922, *Pammel & Trenk*.

The type collection is from Sauk County, in one of the shallow gorges that often break the perpendicular faces of the sandstone cliffs cut by the Wisconsin River. Growing for the most part ten to twenty feet above the top of the talus slope, it can be collected only with some difficulty. This material differs from New York material of *A. noveboracense* (loaned from the New York State Museum through the courtesy of Mr. H. D. House and Mr. Neil Hotchkiss) by its small anthers, these being only 0.4 mm. long, as opposed to those of the more eastern species, which are 0.6 mm. long. This difference, however, does not hold in the other material of the Wisconsin and Iowa plant. The plants of the author's collections were somewhat recumbent down the face of the cliffs, so that the mature capsules were on recurved (thus erect) pedicels, and the inflorescence tended to become secund on each branch. The Iowa plants were more erect.

Material of *A. noveboracense* from Oxford, New York, collected by Mrs. M. H. Fitch, July 20, 1889 (the type of the species came from Oxford) has a rather strict inflorescence and perfectly glabrous leaves. A sheet from "Peckamoose, Catskill Mts." collected by C. H. Peck, approaches the Wisconsin plant in its looser inflorescence, and leaves somewhat pubescent toward the margin.

The Iowa specimens here cited were kindly loaned by Drs. Pammel and Cratty, and formed the bases for the reports of *A. noveboracense*² and *A. uncinatum*³ from Iowa. The latter species is accredited to

¹ Specimen in the Herbarium of the Milwaukee Public Museum.

² *Plant World* viii. 43 (1905).

³ *Iowa Acad. Sci. Proc.* cxxx. 272 (1923?).

Wisconsin in Gray's Manual and by Britton and Brown, but I have seen no specimens from this state. Dr. Rydberg writes: "We have one specimen of *Aconitum uncinatum* from Wisconsin. It was collected by Lapham at Milwaukee. I think that it should be referred to that species, but the specimen represents a plant somewhat stiffer than the eastern form and with more of the five-lobed leaves. We have no specimens of *A. uncinatum* from any place between Ohio and Wisconsin." It may be added that Lapham used labels with the printed data: I. A. LAPHAM, MILWAUKEE, WISCONSIN, and often wrote in simply the name of his plant, with no information as to locality. He used these labels for plants which did not come from Wisconsin, making confusion similar to that caused in somewhat like manner by Engelmann.¹ On some of his labels Lapham has written "Milwaukee," but Milwaukee, to him, included territory anywhere within twenty-five miles of the present city. There is no *Aconitum* in the Lapham herbarium, now at the University of Wisconsin.

The *Aconitums* of the Gray's Manual region may be distinguished as follows:

- a. Rachis of the inflorescence glabrous, only the distal end of each pedicel pubescent; hooded sepal 17–20 mm. long; leaves 3–(–5)-cleft.....*A. uncinatum*
- a. Rachis and pedicels pubescent; hooded sepal 14–15 mm. long; leaves 5–7-cleft....*b.*
- b. Pubescence spreading; leaves glabrous except sometimes on the inrolled margins; hood arched; flowers blue....*c.*
- c. Carpels 12–20 mm. long at maturity; leaf-margins glabrous.....*A. noveboracense*
- c. Carpels 8–9 mm. long at maturity; leaf-margins appearing ciliate, but really with scattered hairs on the inrolled part.....*A. noveboracense*, var. *quasiciliatum*
- b. Pubescence appressed-incurved; leaves with closely appressed hairs; leaf-margins with copious stiff hairs, not inrolled; hood elongate, cylindrical; flowers white or yellowish.....*A. reclinatum*

In view of its short comparatively thick fruits it was at first intended to publish *A. noveboracense*, var. *quasiciliatum* as a species. This plant, and the variety of Shooting Star next to be discussed, are both confined, so far as is known, to the unglaciated area of southwestern Wisconsin and neighboring states.

DODOCATHEON MEADIA L.—The common Shooting Star, on prairies, bluffs, and in woods, across southern Wisconsin, and north to Brown, rarely to St. Croix, County, is a stout plant, 2.5–6 dm. tall, with an

¹ See RHODOBA XXV. 109 (1923).

ample umbel of from 6 to 18 pale lilac to white flowers. On the bluffs bordering the Mississippi River is found a plant much more slender in all its parts, from 2–3.5 dm. tall, with fewer (2–11, rarely 18) flowers of a deep claret color. In fruit the plants are very distinct. The stout pale-flowered plant has an ovoid-conical or broadly cylindrical capsule, 5–7.5 mm. thick and 10–15 mm. long, with dark brown, nearly black seeds. The slender brilliant-flowered plant has a narrowly cylindrical capsule, 3–4.5 mm. thick and 13–16 mm. long, with light castaneous or olive-brown seeds. A distinction observable in the fresh plants lies in the tips of the sepals and bracts, which, in the smaller variety, bear each a minute red glandular spot. These seem to fade at least partially when the plants are pressed.

These two plants have been grown side-by-side for 14 years in the garden of Dr. C. H. Bunting of this city, who transplanted the slender variety (the "Jewelled Shooting Star," he calls it) from La Crosse. Each has remained constant. Dr. Bunting has noted that while the stout plant, native to the vicinity of Madison, has reseeded and spread, the slender plant has not.

D. MEADIA var. **amethystinum**, n. var., planta gracilis; scapis 2–3.5 dm. altis, floribus 2–11(–18); petalis intense rubicundo-purpureis; capsulis maturis cylindraceutis, 3–4.5 mm. diametro, 13–16 mm. longis; seminibus solute castaneis vel olivaceis.—WISCONSIN: Alma, June 25, 1928, *May Lees* (fruit); Cochrane, June, 1928, *Angeline Rohrer*, (flowers); Fountain City,¹ May 19, 1911, *H. C. Benke* (flowers); La Crosse, May 10, 1983, *Minnie Sheldon* (flowers); Prairie du Chien, June 2, 1928, *N. C. Fassett*, no. 7548 (fruit and flowers) (TYPE in Herb. Univ. of Wis.); Madison, June, 1928, *C. H. Bunting* (fruit from individuals transplanted from La Crosse in 1914). MINNESOTA: Queen's Bluff, Winona, May 27, 1928, *J. M. Holzinger* (fruit).

The only intermediate seen was collected at West Salem, Wisconsin, 13 miles east of La Crosse, by Mr. N. W. Rowe. This plant resembles typical *D. Meadia* in habit, but has the cylindrical capsules and red-tipped sepals and bracts of var. *amethystinum*.

Although here treated as a variety, this plant may yet prove to have specific characters. Indeed it resembles *D. Meadia* less closely than it does some of the Rocky Mountain members of the genus, and seems fully as distinct as many plants of that region now accorded specific rank. It has much the aspect of *D. pauciflorum* and *D. radiatum*, but differs in having the filaments distinct; the capsule is much like that of *D. cylindrocarpum*, but is not circumcissile as in that species.

¹ Specimen in the Herbarium of the Milwaukee Public Museum.

I wish to express gratitude to Miss Lees, Miss Rohrer, Dr. Bunting, Professor Holzinger, and Mr. Rowe, for their help in assembling enough material to study this plant.

ASTER SERICEUS Vent, f. **albiligulata**, n. f., ligulis albis; floribus disci flavibus; bracteis viridibus non purpureis.—WISCONSIN: crumbling limestone bluff, Roxbury, September 29, 1928, *N. C. Fassett*, no. 7546 (TYPE in Herb. Univ. of Wis.).

In typical *A. sericeus* the disk flowers as well as the rays are purplish, and the involucre bracts are more or less marked with purple.

It is a coincidence that but a few rods from this white form of a normally purple-flowered plant, there was a plant of a closely related genus, normally white-rayed, whose rays were decidedly purplish.

ERIGERON CANADENSE L., f. **coloratus**, n. f., ligulis violaceis.—WISCONSIN: crumbling limestone bluff, Roxbury, September 29, 1928, *N. C. Fassett*, no. 7547 (TYPE in Herb. Univ. of Wis.). MASSACHUSETTS: New Bedford, *T. A. Greene*.

MADISON, WISCONSIN.

A TERATOLOGICAL FLOWER OF *CORALLORRHIZA MACULATA*.—On July 25, 1928, in the town of Pelham, Massachusetts, I collected a specimen of *Corallorrhiza maculata* Raf. growing under normal conditions. Upon examination later I noted that one of the flowers was markedly different from the others. An examination revealed the interesting fact that this flower was double, either due to fusion or to splitting. The sepals were normal in general appearance, but were five in number. Two were superior in position, two were lateral, and the fifth was basal underneath the lips which were two in number. Both of these lips were normal in size and color and were free to the base. There were two lateral petals and also a third petal which occupied a superior position between the two upper sepals. All of these sepals and petals were free. There were two columns which appeared normal except that they were fused at the sides. The whole plant was 13½ inches high with a raceme of 16 flowers of which all, except the one noted, were normal.—S. JUDSON EWER, Champaign, Illinois.